

ABSTRACT

The aim of this study was to evaluate the efficacy and safety of right sacrospinous ligament fixation in surgical treatment of apical defect and to analyse the risk factors of both treatment failure and prolapse recurrence.

The study included 150 patients with advanced pelvic organ prolapse (POP-Q III and IV) treated surgically from 2010 to 2016 in the Department of Operative, Endoscopic and Oncological Gynecology, Polish Mother's Health Center Institute in Lodz. The test group was divided into three equal subgroups depending on the type of the applied surgical technique. Group 1 consisted of patients who underwent right sacrospinous ligament fixation of the uterus. In Group 2, patients had a previous history of vaginal hysterectomy and in this group right sacrospinous ligament fixation of the vaginal vault was performed. Patients who simultaneously underwent vaginal hysterectomy and right sacrospinous ligament fixation of the vaginal apex formed Group 3.

Efficacy and safety of the analysed surgical techniques were evaluated prospectively based on clinical examination and re-evaluation according to the POP-Q scale after 1-, 3-, and 12-months post-surgery. Upon first check-up (after one month) in all patients a satisfactory defect correction was observed. After 3 months, recurrence was noted in two individuals: one in Group 1 and one in Group 3. After 12 months, recurrence rate was 4, 3 and 7 in Groups 1, 2 and 3, respectively. None of the patients who underwent sacrospinous ligament fixation, regardless of the applied technique, suffered from any serious complications, including bladder or rectum perforation or a life-threatening blood loss. Post-operative gluteal pain lasting longer than 14 days was observed among 4 patients in Groups 2 and 3. Other patients suffered from mild ipsilateral pain, gradually subsiding within a few days post-surgery.

In our study we have demonstrated that sacrospinous ligament fixation of the vagina or the uterus is an effective and safe technique with a low number of complications. In the analysis, no difference in treatment efficacy was noted between the applied surgical techniques. Moreover, no correlation has been noted between failure rate in our patients and the defined risk factors: the efficacy of the sacrospinous ligament fixation in treating pelvic organ prolapse seems to be independent from pelvic organ prolapse recurrence risk factors.